

Appln. No.: 10/643,097

Reply to Office action of October 3, 2006

LISTING OF CLAIMS:

1(Original). A method of fabricating PTFE material comprising:

preparing a mixture of PTFE resin powder and a susceptor material;

feeding the mixture into a compaction zone to at least partially compact and shape the mixture; and

providing a continuous flow of the mixture from the compaction zone to a heating zone and heating and sintering the mixture within the heating zone by exciting the susceptor material by application of wave energy.

2(Original). The method of claim 1 including drawing a vacuum on the mixture within the heating zone to extract air from the mixture.

3(Original). The method of claim 2 wherein the heating zone has an initial stage for preheating and finishing compaction of the mixture prior to sintering the mixture.

4(Original). The method of claim 2 including passing the sintered mixture through a cooling zone following the heating zone.

5(Original). The method of claim 1 including cutting the PTFE material while the mixture is at a temperature below a sintering temperature within the heating zone but above ambient temperature.

6(Original). The method of claim 1 wherein the mixture is compacted into a generally tubular form.

7(Original). The method of claim 1 wherein the mixture is heated by microwave energy.

8(Original). A method of fabricating a PTFE material, comprising:

preparing a mixture of PTFE resin powder and a susceptor material;

compacting the mixture; and

sintering the mixture by exciting the susceptor material with microwave energy.

9(Original). The method of claim 8 including drawing a vacuum on the mixture during the sintering step to extract air from the mixture.